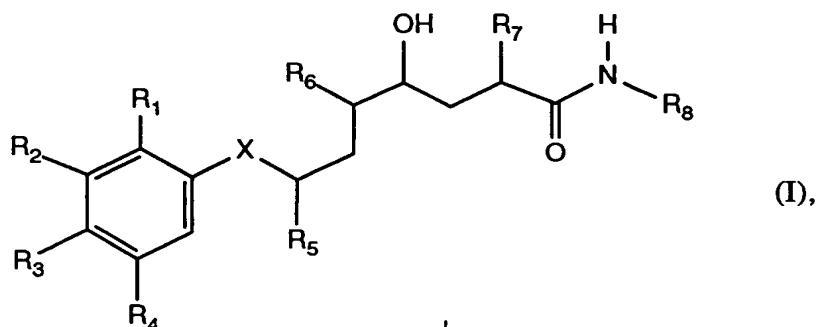


Novel delta-amino-gamma-hydroxy-omega-aryl-alkanoic acid amides

Abstract

$\delta$ -Amino- $\gamma$ -hydroxy- $\omega$ -aryl-alkanoic acid amides of formula I



wherein R<sub>1</sub> is hydrogen, hydroxy, lower alkoxy, cycloalkoxy, lower alkoxy-lower alkoxy or free or esterified or amidated carboxy-lower alkoxy, R<sub>2</sub> is hydrogen, lower alkyl, cycloalkyl, lower alkoxy-lower alkyl, lower alkoxy-lower alkoxy-lower alkyl, cycloalkoxy-lower alkyl, hydroxy, optionally lower alkanoylated, halogenated or sulfonylated hydroxy-lower alkoxy; amino-lower alkyl that is unsubstituted or substituted by lower alkyl, by lower alkanoyl and/or by lower alkoxy carbonyl; optionally hydrogenated heteroaryl-lower alkyl; amino-lower alkoxy that is substituted by lower alkyl, by lower alkanoyl and/or by lower alkoxy carbonyl; oxo-lower alkoxy, lower alkoxy, cycloalkoxy, lower alkenyloxy, cycloalkoxy-lower alkoxy, lower alkoxy-lower alkoxy, lower alkoxy-lower alkenyl, lower alkenyloxy-lower alkoxy, lower alkoxy-lower alkenyloxy, lower alkenyloxy-lower alkyl, lower alkanoyl-lower alkoxy, optionally S-oxidised lower alkyl-thio-lower alkoxy, lower alkylthio-(hydroxy)-lower alkoxy, aryl-lower alkoxy, optionally hydrogenated heteroaryl-lower alkoxy, cyano-lower alkoxy, free or esterified or amidated carboxy-lower alkoxy or free or esterified or amidated carboxy-lower alkyl, R<sub>3</sub> is optionally halogenated lower alkyl, lower alkoxy-lower alkyl, cycloalkoxy-lower alkyl, hydroxy-lower alkyl, optionally S-oxidised lower alkylthio-lower alkyl, optionally hydrogenated heteroarylthio-lower alkyl, optionally hydrogenated heteroaryl-lower alkyl; amino-lower alkyl that is unsubstituted or N-mono- or N,N-di-lower alkylated, N-lower alkanoylated or N-lower alkanesulfonylated or N,N-disubstituted by lower alkylene, by unsubstituted or N-lower alkylated or N-lower alkanoylated aza-lower alkylene, by oxo-lower alkylene or by optionally S-oxidised thia-lower alkylene; cyano-lower alkyl, free or

esterified or amidated carboxy-lower alkyl, cycloalkyl, aryl, hydroxy, lower alkoxy, cycloalkoxy, lower alkoxy-lower alkoxy, cycloalkoxy-lower alkoxy, hydroxy-lower alkoxy, aryl-lower alkoxy, optionally halogenated lower alkoxy, optionally S-oxidised lower alkylthio-lower alkoxy, optionally hydrogenated heteroaryl-lower alkoxy, optionally hydrogenated heteroarylthio-lower alkoxy; amino-lower alkoxy that is unsubstituted or N-mono- or N,N-di-lower alkylated, N-lower alkanoylated or N-lower alkanesulfonylated or substituted by lower alkylene, by unsubstituted or N'-lower alkylated or N'-lower alkanoylated aza-lower alkylene, by oxa-lower alkylene or by optionally S-oxidised thia-lower alkylene; cyano-lower alkoxy or free or esterified or amidated carboxy-lower alkoxy, or together with  $R_4$  is lower alkylenedioxy or a fused-on benzo or cyclohexeno ring,  $R_4$  together with  $R_3$  is lower alkylenedioxy or a fused-on benzo or cyclohexeno ring, or is hydrogen, lower alkyl, hydroxy, lower alkoxy or cycloalkoxy, X is methylene or hydroxymethylene,  $R_5$  is lower alkyl or cycloalkyl,  $R_6$  is unsubstituted or N-mono- or N,N-di-lower alkylated or N-lower alkanoylated amino,  $R_7$  is lower alkyl, lower alkenyl, cycloalkyl or aryl-lower alkyl, and  $R_8$  is lower alkyl, cycloalkyl, free or aliphatically esterified or etherified hydroxy-lower alkyl; amino-lower alkyl that is unsubstituted or N-lower alkanoylated or N-mono- or N,N-di-lower alkylated or N,N-disubstituted by lower alkylene, by hydroxy-, lower alkoxy- or lower alkanoyloxy-lower alkylene, by unsubstituted or N'-lower alkanoylated or N'-lower alkylated aza-lower alkylene, by oxa-lower alkylene or by optionally S-oxidised thia-lower alkylene; free or esterified or amidated carboxy-lower alkyl, free or esterified or amidated dicarboxy-lower alkyl, free or esterified or amidated carboxycycloalkyl-lower alkyl, cyano-lower alkyl, lower alkanesulfonyl-lower alkyl, unsubstituted or N-mono- or N,N-di-lower alkylated thiocarbamoyl-lower alkyl, unsubstituted or N-mono- or N,N-di-lower alkylated sulfamoyl-lower alkyl, or a heteroaryl radical bonded *via* a carbon atom and optionally hydrogenated and/or oxo-substituted, or lower alkyl substituted by a heteroaryl radical bonded *via* a carbon atom and optionally hydrogenated and/or oxo-substituted, and the salts thereof, have renin-inhibiting properties and can be used as antihypertensive medicinal active ingredients.

2